REMARKS

Claims 1 and 3-32 are pending in this application.

Claims 1 and 3-32 were rejected.

The Office action states:

> Continued Examination Under 37 CFR 1.114
>
> 1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.   Applicant's submission filed on 07/24/2006 has been entered.

Office Action, page 2.

Applicant notes that the Advisory Action mailed July 3, 2006 stated that Applicant's amendments "raise new issues that would require further consideration and/or search." Advisory Action mailed July 7, 2006, page 1. Applicants note that the current Office action relies on **the same reference** to reject the amended claims. Applicant therefore takes issue with the assertion that Applicant's amendments "raise new issues that would require further consideration and/or search." As Applicant has shown repeatedly and shows again in this response, each of the claims are allowable and Applicant desires to have this application allowed and would prefer to appeal this case as soon as possible if the Examiner is not amenable to allowance.

Specification Objection

The Office Action states that "The abstract of the disclosure is objected to because it contains the title of the invention. The heading on the abstract should only read 'Abstract' or 'Abstract of the Disclosure'." Applicant respectfully requests that the title be removed from the Abstract to bring the abstract into compliance. Applicant believes that the text of the abstract is otherwise compliant with MPEP § 608.01.

Section 35 U.S.C. § 101 Rejections

The Office Action states:

> Claims 1, 3 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
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> In claims 1, 3 14, a material management system including determining an optimal time to empty waste container using different factors. In claims 15 23, 29 and 32, a computerized method for scheduling a pick up time to remove of one or more waste containers including determining fullness of the container using different factor automatically schedule a waste container removal optimal time. Claims 24 28 and 30 31 a computer program stored on a tangible storage medium for use in scheduling a pick up time to remove one or more waste container using different factors to determine a schedule the removal of the waste container for optimal time. These claims appear to merely describe mathematical and data calculation and lack of concrete and tangible result. The practical application of the claimed invention cannot be realized until the information determined is conveyed to the user. For the result to be tangible it would need to output to a user or stored for later use. Hence the claims are treated as nonstatutory functional descriptive material.

Office Action, pages 4-5.

Applicant disagrees. Each of the claims is drawn to statutory subject matter in that each of the claims is directed to the useful, concrete, and tangible result of determining an optimal time to empty each waste container. According to Interim Guidelines for Examination of Patent Applications for Subject Matter Eligibility ("Interim Guidelines"): "In determining whether the claim is for a 'practical application,' the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is 'useful, tangible and concrete.'" Interim Guidelines at 20. A time to empty to a waste container is not an "abstract idea." Rather, it is a useful, concrete, and tangible result regardless of whether the determined time is stored or output to a user.

The assertion that "for the result to be tangible it would need to output to a user or stored for later use" is incorrect under Federal Circuit law. The Federal Circuit found the following claim to be statutory under § 101:

> A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of

> interexchange carriers associated with that subscriber, said method comprising the steps of:
>
> generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and
>
> including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers.

AT&T v. Excel Comm. Inc., 173 F.3d 1352, 1354 (Fed. Cir. 1999). Note that the two claim elements are directed to "generating a message record . . ." and "including . . . a primary interexchange carrier (PIC) indicator . . . " Under the Office Action's reasoning, these two elements do not "output to a user or stored for later use" and therefore do not, produce a useful, concrete, tangible result. The reasoning in the Office action is therefore inconsistent with Federal Circuit law. The *AT&T* reasoning is equally applicable to Applicant's claim. Like the situation in *AT&T*, the final result of Applicant's claimed invention (i.e. determining an optimal time to empty each waste container) produces a useful, concrete, tangible result without pre-empting other uses of a mathematical principle. See *AT&T v. Excel Comm. Inc.*, 173 F.3d at 1358. The requirement that the claim "output to a user or stored for later use" is further inconsistent with the case law cited in the Office action.

> The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601 02, ("the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result' — a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.").

Office Action, page 6. The quoted passage from *State Street* does not require that the invention must "output to a user or stored for later use." Rather, the determination of the final share price is a useful, concrete, and tangible result. Likewise, in the present case the determination of an optimal time to empty a waste container is a useful, concrete, and tangible result.

A time to empty to a waste container is not an "abstract idea."

In summary, the requirement that the claim recite an element to "output to a user or store[] for later use" is inconsistent with and contrary to Federal Circuit law. Applicant therefore requests that the rejection be withdrawn.

Section 35 U.S.C. § 102 Rejections

The Office Action states:

> Claims 1, 15, 24, 3, 4, 5, 8, 11, 14, 16, 25, 17, 18, 26, 19, 21, 28, 29, 30, 32 and 31 are rejected under 35 U.S.C. 102(a) as being anticipated by Nadir (U.S. Patent Application Publication 2002/0077875).
>
> **Regarding claim 1:**
>
> Nadir discloses a material management system including: one or more waste containers adapted to receive and compact waste (abstract); a fullness-measuring subsystem for determining the fullness of one or more waste containers (fig. 1, page 1, section 0007); a computerized scheduling subsystem in communication with the fullness-measuring subsystem for automatically determining an optimal time to empty each waste container (fig. 1, page 3, section 0028-0036), based the fullness of the waste container (fig. 1, truck with waste container) and scheduling factors (page 3, section 0028-0030) including customer preferences (page 2, section 0034, no customers want the waste container overflow) and waste hauler limitations (page 2, section 0022), and where the computerized scheduling subsystem (fig. 1, unit computer) stores at least one scheduling factor before determining the optimal time to empty each waste container (page 3, section 0030).

Office Action, pages 8-9.

Applicant disagrees. Claim 1 requires, in part, "a computerized scheduling subsystem . . . for automatically **determining an optimal time to empty each waste container, based on the fullnesses of the waste container and scheduling factors including customer preferences and waste hauler limitations, and where the computerized scheduling subsystem stores at least one scheduling factor before determining the optimal time to empty each waste container.**" Golan does not show these limitations. The Office action states that the scheduling factors of customers preferences are shown by Golan at "page 2, section 0034, no customers want the waste container to overflow." Paragraph 0034 of Golan states:

> Compactors are always ready to accept waste and won't overflow. The compactor are never overweight. Compactor maintenance is enhanced due to operational data communication with the central location. It is easy to combine the present invention with any kind of compactor, requiring only minor changes.

Golan, paragraph 0034.

This paragraph does not disclose "determining an optimal time to empty a waste container, based on . . . . customer preferences." The paragraph does not enumerate any customer preferences, nor does it show determining an optimal time to empty a waste container based on customer preferences. The Office action states that "no customers want the waste container to overflow," but this is not disclosed in the cited portion of Golan. Furthermore, the statement that "no customers want the waste container to overflow," misses the point of customer preferences as discussed in this application. Some customers may prefer that their waste container always be full before they are emptied, while other customers may prefer that their waste containers always be emptied before they are full. In any case, the cited portion of Golan does not disclose the use of any customer preference in the determination of when to empty a waste container.

Second, the claim requires "determining an optimal time to empty a waste container, based on . . . . waste hauler limitations." Golan also fails to disclose this limitation. The Office action cites paragraph 0022 of Golan to show this limitation. That paragraph states:

> The microprocessor of each compactor continuously calculates predicted trash weight and target time, such information is crucial for the fleet management unit to generate a pick-up schedule for all compactors. In one preferred embodiment, the target time is calculated based on the target weight reaching within 97-100% of the actual weight. In another preferred embodiment, the target time is calculated based on the target weight reaching its 97-100% of actual weight 24 hours in advance. The microprocessor is attached to and adapted to work with any kind of compactor used by the customers.

Nothing in this paragraph discloses determining an optimal time to empty a waste container **based on waste hauler limitations**. Predicted trash weight and target time are not waste hauler limitations. In the absence of any evidence or reasoning to show this limitation it is simply not disclosed in Golan.

Third, the claim requires that the scheduling factors be stored before determining the optimal time tot empty each waste container. The most relevant portion of paragraph 30 of Golan states that "[t]he fleet management unit stores past and most recent data regarding target times." Target times are not scheduling factors that include waste hauler limitations or customer preferences, as required by the claim. Golan therefore does not disclose this limitation.

Applicant has shown that Golan fails to disclose each limitation of claim 1. Claims 3-14 depend from claim 1 and are therefore not anticipated by Golan. Claims 15, 24, and dependent claims include similar limitations that are not disclosed in Golan. Applicant respectfully requests allowance of all claims

SUMMARY

Applicants contend that the claims are in condition for allowance, which action is requested. Applicants do not believe any fees are necessary with the submitting of this response. Should any fees be required, Applicants request that the fees be debited from deposit account number 02-0383.

Respectfully submitted,

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